

Baltic International Yearbook of Cognition, Logic and Communication

Volume 6 *FORMAL SEMANTICS AND PRAGMATICS. DISCOURSE, CONTEXT AND MODELS*

Article 4

2011

The Past and Future of Meaning

Jaroslav Peregrin

Academy of Sciences of the Czech Republic

Follow this and additional works at: <https://newprairiepress.org/biyclc>



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Recommended Citation

Peregrin, Jaroslav (2011) "The Past and Future of Meaning," *Baltic International Yearbook of Cognition, Logic and Communication*: Vol. 6. <https://doi.org/10.4148/biyclc.v6i0.1564>

This Proceeding of the Symposium for Cognition, Logic and Communication is brought to you for free and open access by the Conferences at New Prairie Press. It has been accepted for inclusion in *Baltic International Yearbook of Cognition, Logic and Communication* by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

The Baltic International Yearbook of
Cognition, Logic and Communication

October 2011 Volume 6: *Formal Semantics and Pragmatics:
Discourse, Context, and Models*
pages 1-16 DOI: 10.4148/biyclc.v6i0.1564

JAROSLAV PEREGRIN
Academy of Sciences of the Czech Republic
& University of Hradec Králové
jarda.peregrin.cz

THE PAST OF MEANING: RES COGITANS INFILTRATED INTO THE WORLD OF RES EXTENSA¹

ABSTRACT: For many centuries, a predominant view of meaning was that the meaning of a word is some kind of chunk of mind-stuff (“idea”) glued to the word and animating it. However, while the traditional view was that we must first understand meaning, which enables us to understand language and hence our linguistic practices, a new approach to semantics that has emerged in the second half of the twentieth century, and which I see as marking the future of meaning, suggests that it is our linguistic practices on which we must concentrate from the beginning. In this paper I suggest a specific understanding of these practices, yielding the conclusion that meanings are reasonably seen as creatures of our activity of setting up certain systems of rules, thus opening up new kinds of virtual spaces which we can “enter”. Meaning is what emerges within the intricately orchestrated space that we have somehow managed to bring into being by means of accepting the rules which are in charge of our language games, especially the game of giving and asking for reasons.

In his celebrated *Essay on human understanding* (1690), John Locke claims:

The meaning of words being only the ideas they are made to stand for by him that uses them, the meaning of any term is then showed, or the word is defined, when by other words the idea it is made the sign of, and annexed to, in the mind of the speaker, is as it were represented, or set before the view of another; and thus its signification ascertained.

In this way he clearly articulated what was, for many centuries, a predominant view of meaning; namely that meaning of a word is some kind of chunk of mind-stuff (“idea”, in his words) glued to a word and animating it. This reinforces the Cartesian view that it is only some otherworldly stuff, *res cogitans*, which is capable of animating the mechanical, spiritless *res extensa* of that world through which we steer our bodies.

I think that though now we should know better than Descartes and Locke, it is this kind of theory of meaning which still holds some of us captive.² But I think that its attraction is merely a result of fallacious reasoning. It is true that *it is only conscious beings that can make truly meaningful pronouncements*. It is also true that *meaningful pronouncements are usually accompanied by mental activity*. And it is equally true that *language can be used for communicating thoughts*. But none of these premises, not even all of them together, gives us a conclusion that meaning is a mental phenomenon.

The reasons, I think, are, in a nutshell, the following: Though it is true that only conscious beings can make meaningful pronouncements, it does not follow that an individual mind can endow an expression with a meaning. I think that it takes a complex collaboration of multiple minds. (Notice that children that were, as a matter of accident, raised by beasts, did not develop anything comparable to human language.) Though meaningful pronouncements are usually accompanied by mental activity, it does not follow that these activities have to do with meaning. (Notice that words in a book do have meaning, and we do not say that they would lose it if nobody paid attention to them and hence there were no mental activity around.) And though language can indeed be used for communicating thoughts, it does not follow that the thoughts communicated are meanings. (On the contrary, it is only in so far as I am able to find expressions that already have an appropriate meaning that I am able to communicate something.³)

I think that once we realize all of this, we should not be tempted to see meaning as a kind of mental content. Despite this, such “internalist” construals of meaning have been ubiquitous throughout the whole twentieth century, and they seem to be still popular now at the beginning of our twenty-first century. Consider Russell’s explanation, from his *Problems of Philosophy* (1912, Chapter V), of how language works:

We must attach *some* meaning to the words we use, if we are to speak significantly and not utter mere noise; and the meaning we attach to our words must be something with which we are acquainted.

This explanation is backed up by a mentalist explanation of what it is that we are acquainted with and what our words thereby come to stand for:

We shall say that we have *acquaintance* with anything of which we are directly aware, without the intermediary of any process of inference or any knowledge of truths. Thus in the presence of my table I am acquainted with the sense-data that make up the appearance of my table—its colour, shape, hardness, smoothness, etc.; all these are things of which I am immediately conscious when I am seeing and touching my table.

Hence words are basically labels stuck on imprints of things in our mind.

Much later, John Searle (1983, p. 28) presents us with a different, but equally mentalist picture: “Meaning exists only where there is a distinction between Intentional content and the form of its externalization and to ask for the meaning is to ask for an Intentional content that goes with the form of externalization”; where (p. 1) “Intentionality is that property of many mental states and events by which they are directed at or about or of objects and states of affairs in the world.” Searle (pp. 160–1) thus concludes that

The philosophy of language is a branch of the philosophy of mind. In its most general form it amounts to the view that certain fundamental semantic notions such as meaning are

analyzable in terms of more fundamental psychological notions such as belief, desire, and intention.

Hence though reasons for locating meanings in the mind, and for embracing varieties of ‘mentalist semantics’, are many, the very idea of meaning being sealed within one’s mind, as I have already indicated, is, I am convinced, untenable. To see a vivid illustration of the problems with this individualist construal of meaning, let me quote a famous passage from Wittgenstein’s *Philosophical investigations* (1953, §293):

Suppose everyone had a box with something in it: we call it a ‘beetle’. No one can look into anyone else’s box, and everyone says he knows what a beetle is only by looking at his beetle. – Here it would be quite possible for everyone to have something different in his box. One might even imagine such a thing constantly changing. – But suppose the word ‘beetle’ had a use in these people’s language? – If so it would not be used as the name of a thing. The thing in the box has no place in the language-game at all; not even as a something: for the box might even be empty. – No, one can ‘divide through’ by the thing in the box; it cancels out, whatever it is.

This indicates that if meanings were to be impeccably hidden within one’s mind, they would become idle. We would be able to play our linguistic games just as we do now even if such meanings—all of a sudden—vanished.

An obvious objection might be that the games are what they are just insofar as they are accompanied by the mental activities of the speakers; and if they were to vanish, the games would become mere poor *simulacra* of what we thinking people do. However, Wittgenstein’s point is that a criterion which we use to tell whether somebody is a speaker, whether she plays our language games, and indeed whether she is a thinker, does not (and cannot) involve finding out what she has or does inside of her mind. Hence whatever other interest there might be in studying the “inside” of another’s mind, knowledge of its content, or even of its mere presence, cannot be part of the language games as such.

In a recent book Machery (2009) urged the distinction between “concepts” in the psychological sense and “concepts” in the sense of philosophers. The former “characterize concepts as those bodies of knowledge that are stored in long-term memory and that are used in the processes underlying the higher cognitive competences”. This is an instructive disambiguation; preempting some discussions in the vicinity of current cognitive science, where philosophers and scientists sometimes tend to talk past each other precisely because of this unobserved ambiguity. But we should realize that insofar as we want to use the term “concept” so that concepts are a sort of meanings, then the Wittgensteinian considerations imply that we are barred from employing the psychological sense of the term.

It seems, though, that the metaphor that the words of our language, in contrast to other types of sounds, are *animate*, has deep plausibility. And if we were to discard the possibility that it is the magic of our mind that does the animation, what else could do it? The answer, I believe, is that it is the intricate things we do with them—the fantastically complicated web of our linguistic practices, of our language games (and, to wit, their rules—more about this later). Entrenched in these practices words “come to life” in our hands in the sense in which we say that a puppet comes to life in the hands of a skillful puppeteer. But let me first mention some historical alternatives to the mentalist construal of meaning.

FROM MEANING TO LINGUISTIC PRACTICES

One alternative is obvious: we may think about our expressions as standing for not mental, but rather some real entities. After all, an expression such as *the president of the USA* seems to stand for a concrete person. But this proposal is notoriously problematic, if not for other reasons, then because the real world does not provide a sufficient supply of suitable entities. It is not only that it might be hard to find *entities* stood for by words like *walk*, *justice* or *before*, but even the *prima facie* paradigmatic examples, like *the president of the USA*, turn out to be problematic, for it turns out that what they appear to stand for cannot be their meaning (if the person whom the expression actually points out were to be its meaning, then the expression would

change its *meaning* after almost every election. . .).

Frege (1918/9) famously argued that for this reason we must consider meanings as inhabitants of a “third realm of being”—a realm that is as immaterial as the realm of the mental, but at the same time as objective as that of the real, tangible things. Not much later, this realm was colonized by mathematics (which developed, out of the science of numbers, into a general science of abstract structures), which appointed set theory the caretaker of the realm. Carnap (1947), Montague (1974) and others then provided for an explication of various kinds of meanings using denizens of this very realm—building on Frege’s insight that the kind of creature that is most useful for this purpose is *function*, and incorporating insights of Kripke (1963) and others about the way we can accommodate modal and counterfactual aspects of meaning, they developed a number of refined and sophisticated models of the semantics of various parts of natural language.

What, if anything, is wrong with this approach and with the answer to the question *what is meaning* that it incorporates? Maybe nothing; but, by itself, it is not a *complete* answer and hence no real answer at all. What does it mean to say that the meaning of, say, the word *dog* is, for instance, the function that maps every possible world onto the set of all the dogs of that world? Superficially it looks analogous to pointing out the bearer of a proper name in response to an analogous query. But surely this analogy does not stand up to scrutiny—by giving this explication we do not mean that the word came to mean what it does because our ancestors used it to christen the kind of function we put forward. But if not this, *what* is the claim that the meaning of the word is this function supposed to say?

Hence I think that the Fregean answer must be at least supplemented by an additional story that would vindicate it. It seems that what is problematic is the very assumption that our words have meanings in that they *stand for* the entities that they mean. Is there an alternative? Let us give voice to Wittgenstein once more. He writes (1958, p. 4):

Frege ridiculed the formalist conception of mathematics by saying that the formalists confused the unimportant thing, the sign, with the important, the meaning. Surely, one wishes to say, mathematics does not treat of dashes on a

bit of paper. Frege's idea could be expressed thus: the propositions of mathematics, if they were just complexes of dashes, would be dead and utterly uninteresting, whereas they obviously have a kind of life. ... And further it seems clear that no adding of inorganic signs can make the proposition live. And the conclusion which one draws from this is that what must be added to the dead signs in order to make a live proposition is something immaterial, with properties different from all mere signs. But, if we had to name anything which is the life of the sign, we should have to say that it was its use. ... The mistake we are liable to make could be expressed thus: We are looking for the use of a sign, but we look for it as though it were an object co-existing with the sign.

This is, I think, a crucial point. It seems to me that we are so blinded by the fact that some elements of language, notably proper names, are used to stand for certain objects, that we do not realize that the general relationship between an expression and its meaning is very different. In fact it is not a relationship between two *entities* at all: it is a matter of the expression being put to use within our language games (or, as I will claim later, its *role*).⁴ It is only after we explicate this use or this role in terms of functions (in the Fregean, mathematical sense) that we may come to see it as a relationship, but this is a *post hoc* reconstruction, not something we would discover.

The idea not only that meaning should not be seen as a chunk of mental stuff transferred from one mind to others by means of an expression, but also that we should not see meaning as any kind of object whatsoever, was famously urged by Quine. This leads to a more far-fetched alternative to the traditional, mentalist construal of meaning; an alternative that denies not only that expressions stand for *mental* objects, but that expressions *stand for* any kind of *objects*. Quine stresses that when we learn language we do not see any fibers connecting expressions with objects and if such fibers were to be a matter of some associations inside of the minds of those who speak the language, no one would ever have the chance to learn a language. Quine (1969, p. 28–9) writes:

Each of us, as he learns his language, is a student of his

neighbor's behavior ... the learner has no data to work with, but the overt behavior of other speakers.

We may summarize Quine's standpoint in an aphoristic dictum *There is nothing in meaning that was not in behavior before*. This is to say that if we consider meanings as objects, then they must result from a recapitulation of behavior. This situation may lead us to the conclusion that the whole pursuit of meaning is hunting a chimera. After all, use of an expression may be quite heterogeneous, variable and elusive. What sense, then, does it make to try to explicate it as an object? And indeed Quine comes to be very skeptical with respect to the very usefulness of the concept of meaning. He claims (1992, 56): "I would not seek a scientific rehabilitation of something like the old notion of separate and distinct meanings; that notion is better seen as a stumbling block cleared away." He is not alone. It is interesting to see that even a thinker otherwise quite alien to Quine, namely Chomsky, concurs (1993, 21): "Communication does not require shared 'public meanings' ... Nor need we assume that the 'meanings' of one participant be discoverable by the other."

The message appears to be that it is natural science that successfully describes 'what there is', and there is no reason to deviate from it even in the case of language and meaning. (Though Quine and Chomsky differ very much as to what natural science should do to account for meaning: for Quine it is accounting for certain kinds of behavior and dispositions to such behavior, for Chomsky it is mapping our "language faculty", i.e. a certain compartment of our mind/brain.) As Devitt (1994, p. 545) put it, "semantics is an empirical science like any other."

LANGUAGE AS A ROLE-GOVERNED SOCIAL INSTITUTION

One important aspect of this development is that it reverses the traditional order of explanation in semantics. While the traditional view was that we must first understand meaning, which enables us to understand language and hence our linguistic practices, the new approach suggests that it is our linguistic practices on which we must concentrate from the beginning. In the case of Quine and his followers, the first impulse was the idea that the most sensible way to find out what meaning is is via finding out how we come to acquire meaning, hence

via what linguistic practices we learn when we learn language. But the next step was the realization of the fact that this reversal changes the nature of the enterprise of semantics altogether: once we find out how our linguistic practices work, we are in fact done. We might expect to get the understanding of meaning along the way, as a by-product of the process of the elucidation of the practices; but if such an expectation is frustrated, then perhaps we do not need the concept of meaning at all. For would we need the elucidation of meanings for anything other than the elucidation of the practices?

Another aspect is that this development incorporates semantics quite integrally into the investigation of the rest of the world. (Semantics thus becomes not a prolegomenon to empirical science, or an investigation that would be somehow orthogonal to science, but if not directly a part of science, then certainly something that is continuous with it.) *Naturalism* is the word that comes to mind here; but we should realize that this word is not quite unambiguous. Even if we admit that semantics is based on the empirical investigation of human linguistic practices, it does not directly follow that it is a kind of natural science. Perhaps in accounting for *human* practices we need some conceptual resources that go beyond those of natural science?

Let me mention two examples of theories that may be seen as naturalistic in a broad sense, though they reject the idea that semantics would be able to make do with only the conceptual equipment of natural science. One of them is the theory of John Searle mentioned above: it works with the concept of *intentionality* as one not reducible to any more primitive concepts and that, though Searle tries to treat it as a biological concept, is directly embeddable neither into the conceptual framework of biology, nor of natural science more generally. The other example is the theory of Davidson (1996) that employs the irreducible concept of *truth*.

I think that the reason why we may be suspicious of such a straightforward naturalization of semantics is, to put it bluntly, that language is a social *institution*. This is to say that if we see it, following Quine, as a kind of contrivance of certain practices, then we should not think about mere *habitual* practices like, say, going for walks with friends, but rather more deeply social practices the substratum of which is an intricate system of social rules, though rules remaining largely implicit

in the linguistic performances.

Now institutions are, to be sure, something that is in no way super-natural. However, they constitute a level of reality which is so intricate and so complex that there is, I think, no hope for practically reducing it to an underlying level, such as the level of causal processes. (We may claim that despite this it is so reducible “in principle”; the question, however, is what precisely this is supposed to mean.) This, I am convinced, indicates the need for conceptual equipment and linguistic resources nontrivially different from those with which we are equipped by natural science alone.

However though it is hard to doubt that we tend to see our linguistic performances as *correct* or *incorrect* (in various senses and on various levels of the words) and hence that, *in this sense*, there are some rules in play; to put language on the level of institutions like money, law or institutionalized football, may seem to be too far-fetched. Is language a matter of some social enforcement? Do those who talk wrongly suffer some kind of sanctions, whereas those who talk correctly may earn a reward? Is language not rather a spontaneous, unregulated, biological or purely behavioral matter?

It seems to be clear that language *does* have *some* of the identifiable features of a social institution—at school one learns how to use it properly, there are books surveying various aspects of its correct usage, in some countries there are institutes issuing recommendations in this respect etc. (And, conversely, it is clear that any kind of institution rests on some biological resp. behavioral substrate—any kind of institution is brought to life and maintained by people, via their brains, etc.). And I think that also the semantics of language *is* a matter of rules. It is not only rules which we were all forced to learn at school, such as rules of spelling or what in German is called *Rechtschreibung*; I believe that also how and when to use words and expressions is governed by rules (though merely in the sense that we hold it for correct or incorrect). Those who violate these rules are not fined or jailed, but if they do it too often, they may lose their status as intelligible or trustworthy or sane speakers of the language in question (which may be a graver penalty than it might *prima facie* seem).

The most basic trouble for this view of language, then, appears to be its commitment to *implicit* rules. What does it mean to say that

a rule is implicit? Pioneers of twentieth-century analytic philosophy, philosophers like Rudolf Carnap (1934), tended to say that language is based on *conventions*. But it is clear that if we took *convention* as an *explicit agreement*, then this would lead us into a hopeless vicious circle—as an explicit agreement presupposes language, if language were to presuppose explicit agreement, then it would have to presuppose itself. Hence the only way to save the concept of convention as laying the foundations of language is to admit that there is such a thing as an implicit convention. But what would such a thing amount to?

I think that this problem was heavily underestimated by those who used the concept of *convention* as an unexplained explainer, at least until citetlewis02. Lewis's book faced it head-on, and provided a theory of implicit conventions as emerging out of spontaneous solutions to what he called a *coordination problem*. This was a praiseworthy and meticulous attempt at showing that there can be a consistent theory of implicit conventions, and hence that those who see conventions as the rock bottom of language need not lay down their arms in the face of the circularity problem. However, I think that Lewis's solution is still not quite satisfactory.

Elsewhere (see Peregrin 2010) I tried to explain why I think that Lewis's error was to construe the coordination problem that, according to him, gave rise to language, as a problem of coordinating 'code tables' of individual speakers, hence, in effect, of individual languages. I think that what needs explanation is already the establishment of *any* kind of code table, and hence that we must start with the explanations much farther back than where such tables are already in play. And also I think that seeing the whole situation in terms of "coordination" is not sufficient.

This is why I subscribe to a more complicated story about the nature of language and about the implicit rules (or implicit 'conventions') that is, essentially, due to Wilfrid Sellars.

MEANINGS AS ROLES

Before we turn our attention to the Sellarsian notion of linguistic practices, let us return to Wittgenstein's comparison of language and chess. When we play chess, something slightly miraculous happens. Certain

pieces of wood (or ivory or whatever) become pawns, rooks, bishops etc.: creatures capable of interacting with others of their kind in very peculiar ways. How does it happen? Well, the answer is straightforward: the pieces assume certain roles within the game; more precisely they are assigned the roles by the rules of the game. How did the rules come into existence? We have made them up and now we endorse them.

Now the Wittgensteinian idea is that the miraculous ways in which certain kinds of sounds (or scribbles) become various meaningful words has a similar explanation. It happens because the sounds are assigned roles by the rules of our language games. This presupposes enough similarity between language and chess, in particular it presupposes that our language games are constituted in the way our chess games are, i.e. that it is some kind of rules that are behind the meaningfulness of our expressions.

Hence what kind of rules would govern our usage of words? It seems to be obvious that utterances may be correct in certain circumstances, whereas incorrect in others (with possibly a grey zone in between.) The circumstances may be external to our language game (it is correct to assert *This is a dog* when pointing at a dog, whereas we find the very same assertion accompanied by pointing at a trash bin *incorrect*) or may be internal to it (when it is correct to assert a statement of the form *A and B*, it is also correct to assert both *A* and *B*; whereas when *A and B* is not correctly assertible, either *A* or *B* must not be correctly assertible too).

This indicates that one kind of rule that might be considered as a candidate for the type of rule governing the semantics of our language and our language games is *rules of inference*. And indeed this proposal is behind what has come to be called *inferentialism* today, a doctrine starting with Wilfrid Sellars (1953) and elaborated by his follower Robert Brandom (1994). The basic idea is quite simple: just as we can take the semantics of *and* to be determined by stipulating that *A and B* is correctly assertible just when both *A* and *B* are the case, we can take the semantics of other words to be determined by other kinds of inferential patterns. Of course if we take into account empirical vocabulary, then we have to understand inferential patterns in a broader sense (in fact incorporate rules that could be called inferential only by

courtesy). I have discussed this at several other places in detail and will not go into it here.⁵

Putting stress on rules in semantics involves concentrating on the issue of *normativity*. In effect this may lead to the conclusion that what we need to account for our language games are not any *concepts* over and above those employed by natural science; we need to renounce the conviction that in accounting for human practices we can make do with descriptions and with the indicative mode of speech. Maybe what we need is a mode of speech that is not really indicative; maybe we need to admit that we sometimes do not need to state how things are, but rather how, according to a rule we endorse, they *should* be. The idea is that in stating that an expression has a certain meaning, we do not say that the expression is used, as a matter of fact, thus and so, but rather that it *should* be used thus and so—that this is not what people happen to do, but rather that this is what they *ought* to do. Thus, the concept of a rule makes it possible to account for the specificity of human language, meaning, and reason, without invoking any ‘supernatural’ concepts. As Wilfrid Sellars (1949, 311) put it: “To say that man is a rational animal is to say that man is a creature not of *habits*, but of *rules*.”

To summarize, I think that meanings are reasonably seen as creatures of our activity of setting up certain systems of rules, thus opening up new kinds of spaces which we can “enter”. (Think about the exciting and inexhaustible space of chess games which opens up in for us when we agree to follow the rules of chess.) Meaning is what emerges within the intricately orchestrated space that we have somehow managed to bring into being by means of accepting the rules which are in charge of our language games (especially *the game of giving and asking for reasons*). To study meanings is—ultimately—to study inferential (and other) rules implicit to our linguistic practices.

FORMAL SEMANTICS?

What morals do we have to draw from all of this regarding formal semantics? This approach to semantics has been often understood as revealing the meanings that our expressions stand for—be they mental or other kinds of entities. From this viewpoint, the future I foresee

for the theory of meaning may seem to lead to its decline. But I do not think that this is the case. What we need is not an abolishment of formal semantics, but rather a more appropriate way of understanding it.⁶

Linguists have, over decades, if not centuries, accumulated a large body of empirical knowledge regarding the ways we use words; and I think that the frameworks introduced by formal semanticists have served, for some of them, as repositories and accumulators of this knowledge. Hence even though I do challenge the ‘ideological’ foundations on which the frameworks have been erected, I think we need not abandon them—what I, however, feel as imperative, is to change the ideology. The point is that it is the ideology that helps set the directions of further research and of what exactly gets accumulated. Hence as I see it, we need to see the set-theoretical (or other) explications of meanings it brings about as explicative of the functioning of expressions, in particular of their roles with respect to the rules by which this functioning is governed.

In particular, though I have argued that it is better not to view meanings as any kind of objects (*stood for* by expressions), I do not think that this means that they could not be *explicated* by certain objects. This kind of explication has a long and venerable tradition in analytic philosophy (going back to Russell and Carnap) and I do not think we have to shun it. However, the point of any reasonable explication is that it lets us see something more clearly or that it equips us with a more manageable version of the explicatum to be incorporated in some larger model; hence also when we explicate meanings in this way, we have to ask what use it brings us. Hence presenting a formal object, such as a function from possible worlds to classes of individuals, as an answer to the question *what does this mean?* presupposes some background against which it is already clear and agreed upon what kind of purpose such an explication can serve, or it necessitates an additional clarification of the matter.

If it is correct, as I believe, that the meaning of a word is basically its inferential role, then a set-theoretical meaning might be seen as a kind of ‘encapsulation’ of this inferential role and especially as a way of making this role more perspicuous.⁷ (I think that even he who does not want to buy inferentialism *en bloc* may be willing to accept that

what a sentence is inferable from and what is inferable from it renders an important aspect of its semantics and that the semantic values that expressions acquire within a system of formal semantics capture this aspect.⁸) However, this presupposes that we carefully choose the framework of the explication and its set-theoretical tools so that the result can serve this purpose. Not just any set-theoretical or model-theoretical account would do to the same degree.

In fact, in this way, I believe, we only return to the roots of formal semantics. Frege, who introduced *functions* as the principal tool of explicating meanings, did so on the basis of considering the *functioning* of corresponding expressions: the fact that he accounts for the word *blue* as denoting the function mapping blue objects onto T and non-blue onto F is not a result of an attempt to portray its pre-formal meaning, but rather of considering with which names it forms true sentences.

Notes

¹Work on this paper was supported by the research grant No. P401/10/1279 of the Czech Science Foundation.

²Within linguistics and philosophy of language, this theory has mutated into various variants of *representational* theories of meaning, according to which meaning is essentially a mental representation.

³See Peregrin (2001, Chapter 2).

⁴As Sellars (1974) puts it, when we say that an expression has a certain meaning, what we do is not point a link between the expression and an entity, we rather provide a *functional classification* of the expression.

⁵See especially Peregrin (2008; to appear).

⁶I urged this already in Peregrin (1998).

⁷See Peregrin (2001; 2004).

⁸In fact this is reflected by the *praxis* of formal semantics: an argument against the adequacy of a formal analysis is usually based on pointing out some unwanted inferential consequences.

References

- Brandom, R. 1994. *Making It Explicit*. Harvard University Press, Cambridge (Mass.).
- Carnap, R. 1934. *Logische Syntax der Sprache*. Springer, Vienna. English translation *The Logical Syntax of Language*, University of Chicago Press, Chicago, 1937.
- . 1947. *Meaning and Necessity*. University of Chicago Press, Chicago.
- Chomsky, N. 1993. *Language and Thought*. Moyer Bell, Wakefield.
- Coffa, A. 1991. *The Semantic Tradition from Kant to Carnap*. Cambridge University Press, Cambridge.

- Davidson, D. 1996. 'The Folly of Trying to Define Truth'. *Journal of Philosophy* 93: 263–278.
- Devitt, M. 1994. 'The Methodology of Naturalistic Semantics'. *Journal of Philosophy* 91: 545–572.
- Frege, G. 1918/9. 'Der Gedanke'. *Beiträge zur Philosophie des deutschen Idealismus* 2: 58–77.
- Kripke, S. 1963. 'Semantical Considerations on Modal Logic'. *Acta Philosophica Fennica* 16: 83–94.
- Lewis, D. 2002. *Convention*. Blackwell, Oxford.
- Locke, J. 1690. *An Essay Concerning Human Understanding*. Eliz. Holt, London.
- Machery, E. 2009. *Doing Without Concepts*. Oxford University Press, Oxford.
- Montague, R. 1974. *Formal Philosophy: selected papers of R. Montague*. Yale University Press, New Haven.
- Peregrin, J. 1998. 'Linguistics and Philosophy'. *Theoretical Linguistics* 25: 245–264.
- . 2001. *Meaning and Structure*. Ashgate, Aldershot.
- . 2004. 'Pragmatismus und Semantik'. In A. Fuhrmann & E. J. Olsson (eds.) 'Pragmatisch denken', 89–108. Ontos, Frankfurt am Main.
- . 2008. 'Inferentialist Approach to Semantics'. *Philosophy Compass* 3: 1208–1223.
- . 2010. 'Inferentialism and communication: language and the code table problem'. In X. Arrazola & M. Ponte (eds.) 'LogKCA-10: Proceedings of the Second ILCLI International Workshop on Logic and Philosophy of Knowledge, Communication and Action', 103–116. The University of the Basque Country Press, San Sebastian.
- . to appear. 'The Normative Dimension of Discourse'. In K. Allan & K. Jaszczolt (eds.) 'Cambridge Handbook of Pragmatics', —. Cambridge University Press, Cambridge.
- Quine, W. V. O. 1969. *Ontological Relativity and Other Essays*. Columbia University Press, New York.
- . 1992. *Pursuit of Truth*. Harvard University Press, Cambridge (Mass.).
- Russell, B. 1912. *The Problems of Philosophy*. Williams & Norgate, London.
- Searle, J. 1983. *Intentionality*. Cambridge University Press, Cambridge.
- Sellars, W. 1949. 'Language, Rules and Behavior'. In S. Hook (ed.) *John Dewey: Philosopher of Science and Freedom*, 289–315. Dial Press, New York.
- . 1953. 'Inference and Meaning'. *Mind* 62: 313–338.
- . 1954. 'Some Reflections on Language Games'. *Philosophy of Science* 21: 204–228.
- . 1974. 'Meaning as Functional Classification'. *Synthese* 27: 417–437.
- Wittgenstein, L. 1953. *Philosophische Untersuchungen*. Blackwell, Oxford.
- . 1958. *The Blue and Brown Books*. Blackwell, Oxford.